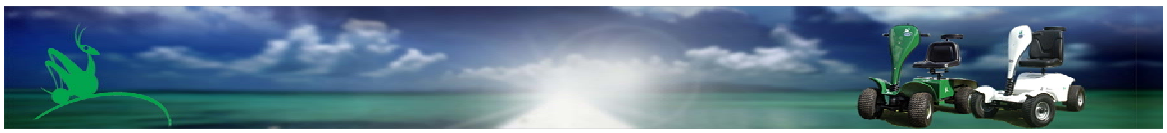
The Grasshopper

Golf Buggy

Owners Manual

Classic - Classic SE - Junior



TECHNICAL SPECIFICATION

Model:	CLASSIC , CLASSIC SE & JUNIOR
Power:	Twin 24 Volt Permanent Magnet 300 Watt D.C. Motors
Transmission:	Direct Drive Through 30:1 Reduction Gearboxes
Speed Control:	Twist grip step-less control for smooth operation up to max. 8mph.
Direction Control:	Forward/Reverse switch conveniently located on the main control panel.
Safety Features:	Piezo reverse warning horn .
Climbing Ability:	1:3 Gradient.
Brakes:	Non-fading regenerative braking plus electromagnetic parking brake.
Battery Charging:	Charging unit plugs directly into rear of buggy.
Batteries:	Two sealed lead acid 12 V x 80/85amp coupled in series
Battery Charger:	8 Amp, 24 Volt with automatic cut-out when charging complete.
Body:	Hand Made in Non-Rusting Glass Reinforced Plastic
Chassis:	MIG Welded High Tensile Steel, With Corrosion Protection
Tyres:	13” x 6.5 x 6” Tubeless.
Turning Radius:	102” (140” Junior)
Overall Height:	34”
Overall Width:	36” (27” or 30” Junior)
Overall Length:	48” (50” Junior)

All Specifications subject to change without notice

INTRODUCTION

Thank you for choosing a Grasshopper Golf Buggy, a product designed and engineered by Leisure Karts (UK) Ltd.

This manual provides all the information you will require to drive your buggy safely and to see that it continues to perform perfectly.

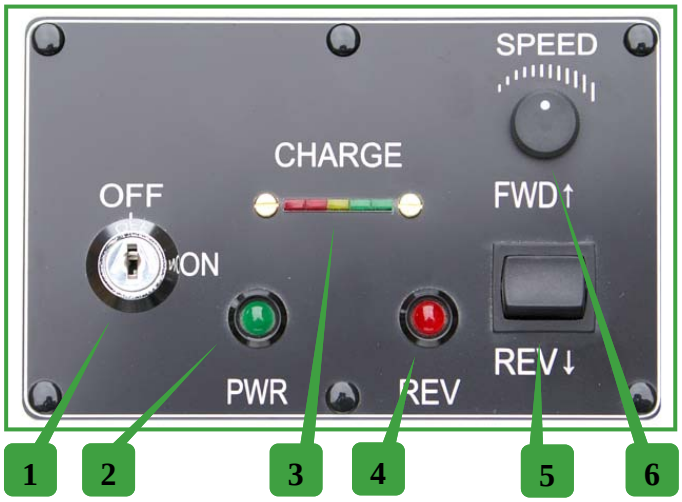
Ensure that you read and understand this manual thoroughly.

It is recommended that insurance cover to include third party liability, theft and accidental damage should be taken. Some household insurance companies will give extended cover.

We can supply details of 'Fish Insurance' an independent insurance company recommended by Leisure Karts (UK) Ltd.

The Grasshopper Junior & Classic SE

CONTROL PANEL



1. **Ignition Switch**
2. **Power LED (Green)**
3. **Battery Charge Indicator (Design may vary see insert)**
4. **Forward / Reverse LED (Red)**
5. **Forward / Reverse Switch**
6. **Speed Control Adjustment**

Ignition Switch
Main On/Off Power Switch. Ensure that this is switched off before dismounting to prevent accidental use of the accelerator.

Power LED (Green)
When lit this indicates that the ignition is switched on and power is connected

Battery Charge/Power Indicator
There are two different types, both consist of a series of LED lights., when fully charged the top or right hand light (dependant on type), will be illuminated As battery charge is used, the light will move either down or to the left. It is advisable to leave the course when the final light is illuminated.

Forward / Reverse LED (Red)
Indicates when the reverse mode switch has been selected, it operates in conjunction with a warning horn.

Forward/Reverse Switch:
This is a rocker switch, when pressed at the top forward mode is selected, when pressed at the bottom reverse mode will be selected.

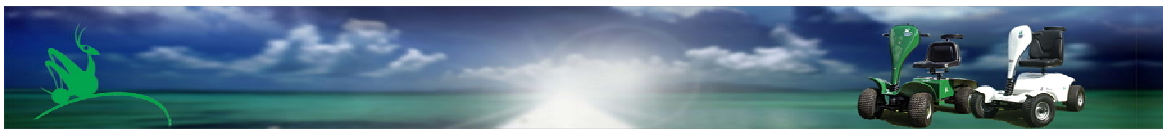
Speed Control Adjustment:
When turned fully, counter-clockwise, the buggy will move forward at 2 m.p.h. By rotating the control clockwise the speed can be increased to a maximum of 8 m.p.h.

DRIVING THE VEHICLE
Sit comfortably on the vehicle and ensure feet are located on the foot tray. Place both hands upon the handlebars. The steering column can be moved towards or away from the driver to suit individual comfort.

The place the key in ignition switch on the control panel. Turn it 90 degrees clockwise to connect the power. The charge/power indicator will light up to indicate power on and will show the battery charge status.

Accelerator Twist Grip

Select forward or reverse mode and turn the accelerator grip gently towards you. The further the grip is turned the faster the vehicle will travel. To slow down, gently return the grip to its resting position.
The grip is spring loaded and if released will immediately cause the vehicle to slow down and stop.



BRAKING SYSTEM

Regenerative Braking System: When you release the accelerator grip, for example when travelling down slopes or up hills, the motor provides a reverse pull effect, rapidly bringing your vehicle to a stop.

Electro Magnetic Brake: This is an automatic safety device, which locks the motor once the vehicle has stopped moving, it prevents it from rolling even if the power is switched off.

The brake lifts off as the accelerator is turned to move forward and re-applies when the accelerator returns to its resting position.

To enable the vehicle to be pushed without battery power there is a free wheel device fitted to your vehicle. By removing the battery cover you will see a lever at the top of each of the two electric drive motors (see below), turn them clockwise as far as they will go, you are now able to push your vehicle. There will however still be some resistance against the motor.

Note: Ensure you return the brake release levers to there original position, by turning the levers fully counter-clockwise, before driving the vehicle.

BATTERIES

Your new Grasshopper Golf Buggy is fitted with SEALED LEAD ACID batteries. Please ensure that the correct maintenance is carried out as per the information below to prolong their life. DO NOT fit other types of battery without first checking compatibility with Leisure Karts.

Charging your Batteries

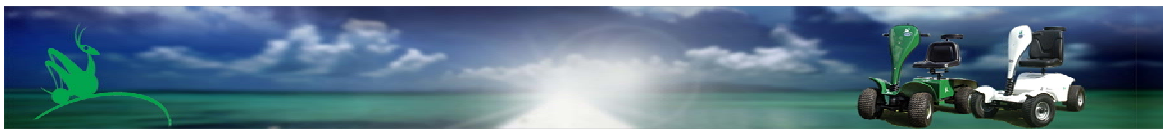
The first charge should be for 24 hours. After that the battery charger will automatically cut out when charging is complete, however, we do not recommend that you leave the charger on for long periods of time once the batteries are fully charged.

Step One – Connect the charger plug into the charging socket on the rear of the Buggy, there is a locating groove to ensure correct polarity.

Step Two – Plug the charger into the mains and switch the mains on, (an in-built safety feature will disable the power system of the buggy).

When using the automatic charger, keep it well ventilated and dry, it is suitable for indoor use only. It is normal for the charger to become warm during use. Always carry the charger never pick it up by the cables.

If you have difficulty finding a suitable place to charge your batteries you may charge them independently with an off-buggy charging lead. (Available as an optional extra).



Battery Maintenance

Your batteries are the heart of your vehicle and the better you take care of them the longer they will last.

- ⇒ Charge your Buggy nightly when in daily use.
- ⇒ Connect the charger to the Buggy before switching on the mains.
- ⇒ Keep the battery terminals and connectors clean.
- ⇒ When using the charger allow plenty of airflow around it.
- ⇒ Charge your Buggy in a well ventilated area.
- ⇒ Do not leave your Buggy uncharged, this will shorten the life of the batteries
- ⇒ Only use the recommended charger.

Battery Life Expectancy

Many factors can significantly alter the performance of the batteries.

- ⇒ The weight of the occupant.
- ⇒ The type of terrain covered.
- ⇒ The style of driving.
- ⇒ Incorrect tyre pressure (we recommend 20 - 29 psi)
- ⇒ The age and condition of the battery.
- ⇒ The ambient temperature the vehicle is used in.

TRANSPORTING YOUR BUGGY

One of the main design criteria for the Grasshopper Classic, was ease of transportation.

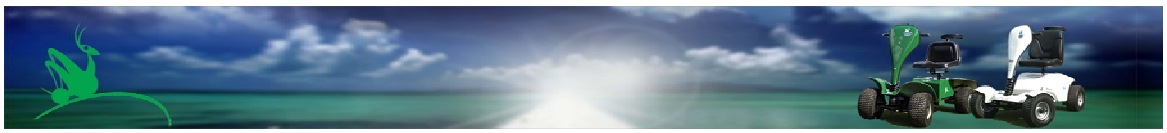
There are two options dependant or the type of vehicle used to carry your buggy.

Firstly, if you have a large family hatchback, MPV or estate car, then you are able to load the buggy into the rear of the vehicle without dismantling, other than removing the seat (even this may not be necessary with larger vehicles).

This is achieved by placing ramps up to the rear of the vehicle and using the buggies own power, driving the buggy up into the vehicle.

Visit www.grass-hopper.co.uk and view a short video demonstrating how.

Secondly, if your car is not able to accommodate the fully assembled buggy, you can easily dismantle the buggy into manageable parts allowing it to be placed into the boot of most cars - The only tool required is a 13mm Spanner to undo the battery terminals.



HOW TO DISMANTLE THE BUGGY

Remove the Seat - On the base of the seat stem you will find the seat locking bolt. Turn this counter clockwise to loosen the seat from the frame. however the lever can only rotate 180 degrees because of the body of the buggy, to overcome this, the lever has a ratchet system to allow further movement. Pull the lever away from the post turn it back to the original position and allow it to spring back, once again turn the lever to unscrew the bolt until the seat can be removed. To re-assemble reverse the procedure.

Remove the Battery Cover and Batteries

Remove the battery cover by releasing the three spring clips (four for the Junior) and then pulling the cover upwards.

Unscrew the battery terminal nuts and lift away the cables (only one nut needs to be removed from the short link cable).
Lift batteries vertically from the frame and stand them in a secure position.

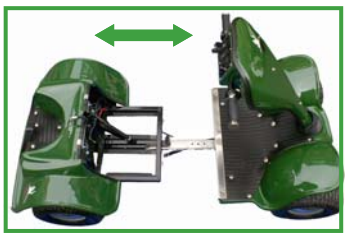
Disconnect The Power Plug

This is the plug that carries power from the rear to the front of the buggy.

It is located at the bottom left side near the foot tray or between the batteries.

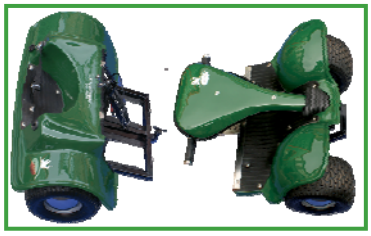
There are two types of plug. One simply pulls away from the socket, there is a locating grove to ensure correct pin alignment on re-assembly. The other type of plug requires twisting a locking sleeve then pulling apart, again a grove ensures correct pin alignment

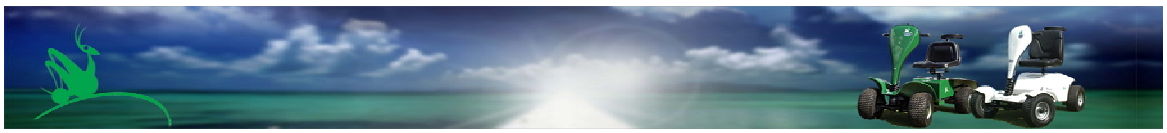
Dismantle The Chassis



To separate the vehicle in two, pull up the spring loaded plunger (located at the centre of the vehicle) and pull the front section from the rear.

The steering column can be lowered ready for placing into a vehicle. The components of the buggy are heavy and care with posture should be taken when lifting – where possible ask for assistance.





When lifting the sections, do not lift by the bodywork. Always use the framework for gripping. The Junior Model has an integral lifting handle built into the rear of the chassis.

It may be advantageous to release the brakes to assist in manoeuvring the rear section on the floor or in the car.

HOW TO ASSEMBLE THE BUGGY

Assemble the Chassis - Ensure that both halves are square to each other. Locate the front stainless steel draw bar into to corresponding slot on the rear section. Slide the two halves together until the spring plunger locates into a retaining hole on the draw bar. Three holes have been provided to suit individual requirement for leg length.

Connect the Power Plug – The power plug connecting the front and rear sections should be re-connected.

Replace Batteries – One at a time, place the batteries into the chassis. On Junior model the terminals should be towards the centre. On Classic and Classic SE Models the terminals should be towards the rear.

Ensure the Brakes are on – If the brakes have been released, ensure that the brake locking levers have been returned fully counter-clockwise.

Replace Battery Cover – Carefully replace the battery cover and click spring clips into position.

Replace the Seat – Line up the seat stem into the seat tube on the chassis and allow it to drop into position. Re-fasten the seat locking bolt until tight.

HOW TO KEEP YOUR BUGGY IN GOOD CONDITION

Apart from having your buggy serviced by an authorised Grasshopper Dealer, you can help its condition by observing the following home maintenance guidelines.

Bodywork:
Wash with a sponge and car shampoo.
Clean regularly with a general purpose spray or cream but not an abrasive cleaner.

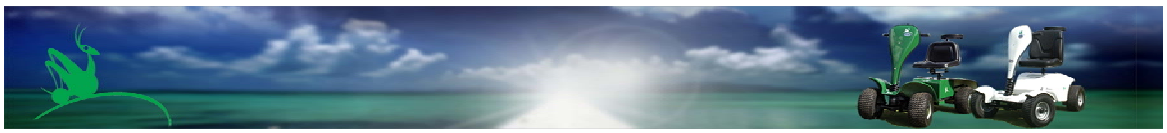
Do not use a power jet wash or hose pipe.

Batteries:
Ensure they are kept fully charged.
Keep terminals clean and lightly greased.

Tyres:
Check the tread and remove any stones or flints. The tyres should be inflated to 29lbs psi (170 kilo Pascal's).
On hard ground the pressure can be lowered to 20lbs psi
(147 kilo Pascal's) for a more comfortable ride.

Seat System:
Make sure it is clean from dirt and grit.

Electrical Plugs:
Make sure plugs are clean, dry and pushed fully home.



TROUBLE SHOOTING

The Buggy has no Power Indication.

- ⇒ Check the front to rear connector is pushed home correctly.
- ⇒ Check that the battery connectors are clean and securely fastened.
- ⇒ Check the ignition is switched on.
- ⇒ Check the batteries are fully charged.
- ⇒ Check connections are secure. This is best done by disassembling the buggy and turning it onto its side.

When connected only the red power LED on the charger illuminates.

- ⇒ Check the charger is plugged into mains and switched on.
- ⇒ Check the charger is plugged securely into the socket.
- ⇒ Check the fuse on the charger.
- ⇒ Check that the connector between the socket and the controller has not come apart. This is best done by disassembling the buggy and turning it onto its side.

The Battery has fully charged but the power indicator shows less than full.

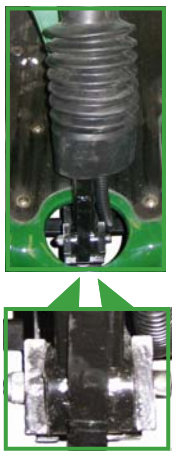
⇒ Check that the front to rear connector is dry and pushed fully home. Pull the plug in and out three or four times to ensure good clean contact.

The steering column swings backward and forward seeming loose.

⇒ Remove the front cover from the handlebars by unscrewing the two wing-nuts on the drivers side of the handlebars and pulling the cover forward.

⇒ Pull the rubber gaiter up to expose the handlebar securing bolt.

⇒ tighten the bolt until movement seems stiff, replace the rubber gaiter and front cover.



If after any of the above actions the buggy still does not function correctly, contact your supplying dealer to arrange an inspection or contact Grasshopper Golf Buggies directly on (+44) 01623 514700

WARNING: The wiring, drive motors, electronic controller and gearbox all require specialist training to service or repair. Your authorised Grasshopper engineer has been trained to carry out such repairs. Unauthorised tampering with the components may invalidate your warranty.

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